

We claim:

1. An isolated and purified homozygous securin-defective human cell line.
2. The cell line of claim 1 which is a tumor cell line.
3. The cell line of claim 1 which is a colon cell line.
4. The cell line of claim 1 which is a colon tumor cell line.
5. A pair of isogenic cell lines in which a first cell line is homozygous securin-defective and a second cell line is securin-proficient.
6. The cell lines of claim 5 which are tumor cell lines.
7. The cell lines of claim 5 which are colon cell lines.
8. The cell lines of claim 5 which are colon tumor cell lines.
9. The pair of cell lines of claim 5 which are provided in a single divided container.
10. A method of screening compounds to identify potential anti-cancer agents, comprising:
contacting a test compound with each of the two isogenic cell lines of claim 5; and
identifying as a potential anti-cancer agent a test compound which preferentially inhibits growth of the first cell line relative to the second cell line.
11. The method of claim 10 wherein the ratio of inhibition is at least 2:1.
12. The method of claim 10 wherein the ratio of inhibition is at least 5:1.
13. The method of claim 10 wherein the ratio of inhibition is at least 10:1.
14. The method of claim 10 wherein the ratio of inhibition is at least 20:1.
15. The method of claim 10 wherein the ratio of inhibition is at least 50:1.

16. The method of claim 10 wherein the cell lines are in culture when contacted with the test compound.
17. The method of claim 10 wherein the cell lines are in xenografts when contacted with the test compound.
18. The method of claim 10 wherein the test compound preferentially kills the first cell line relative to the second cell line.